

## **Attachment 5.1 – Supporting Documents**

### **Schedule**

#### **Madera Region – IRWM Implementation Grant Application**

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## Attachment 5.1, Summary Schedule

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Attachment 5.1, Comprehensive Projects Schedule

Proposal Title: Madera Region IRWM Implementation Projects

Project	Year Month	2011						2012												2013												2014												2015																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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## **Attachment 5.1, Project A – Grant Administration**

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### Attachment 5.1 - Project A - Project Schedule

**Proposal Title: Madera Region IRWM Implementation Application**

**Project Title: Project A - Grant Administration**

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**Attachment 5.1, Project B – Ash Slough Arundo Eradication and Sand Removal**

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## **Attachment 5.1 – Project B – Ash Slough Arundo Eradication and Sand Removal**

### **Schedule Notes**

Assumption – if DWR makes awards in June, 2011 as stated in the PSP, this project can begin implementation immediately (July 2011). In that case, it can be completed within a 42 month period (plus an additional 2 months for completing reports), ending in February 2015. That includes three years of Arundo treatment and sediment removal and subsequent monitoring. If the awards are delayed and project costs are not eligible for reimbursement as of July 1, 2011, the project schedule will be moved back one year. This is because of the timing requirements of Arundo eradication as explained below.

The following are notes explaining Tasks which are not obvious:

Task 9.1 – Application for renewal of 1602 permit - The application for extension of a 1602 permit will take place in early 2012 with the goal of completing it in March, several months before the current permit period ends.

Tasks 9.2, 9.3 and 11.2 – Sediment removal permits and sediment removal – It is difficult to accurately assess the time required for completing the sediment removal permits (SWPPP, 401 and 404). Work on these tasks will start immediately upon grant award; however it is unlikely that it will be completed before the winter rainy season when sediment removal is inadvisable. It is likely that sediment removal activities will start in the late spring of 2012. The appropriate time period for sediment removal is May through October, when the channels are dry. Sediment removal is also not possible where Arundo infestations are still in place. The three year sediment removal schedule will be overseen by the project manager who will direct the landowners to work in those portions of the channel where Arundo is not growing or has already been successfully eradicated.

Task 11.1. – Arundo eradication – Arundo eradication is a three-year process.

Year 1: The first year the Arundo canes are sprayed and mulched. The application of herbicide is generally done in September and October, just before the plants become dormant, in order for the process to result in a sufficient kill-rate of the Arundo to be worthwhile. Prior to spraying the Arundo is mulched and the canes allowed to re-grow to 4-6 feet in height. This is because untreated Arundo canes are often 15-20 feet tall. Spraying the herbicide upward to reach the top leaves can cause dangerous drift, harmful both for urban and agricultural areas. Arundo grows 1-2” per day, so canes are ready for spraying 30-60 days after the initial mulch. After the sprayed canes die, they are mulched in a second pass through the area. This is generally about 60 days after spraying takes place.

Year 2: In the second year, the canes are again mulched, sprayed and mulched with hand-cutting where necessary.

Year 3: In the third year the remaining sparse growth is eradicated either by spraying or by cutting the canes and daubing herbicides on the wound.

Task 14 – Surveys and monitoring -The County's 1602 permit requires monitoring if work is done during the bird nesting season of March 1 to August 1, so monitoring activities will be in place during the initial mulching in July and early August. At this time the biologists will also perform other surveys required by the permit. (see Attachment 5.2, page 3)

Other appropriate monitoring and surveys will be done during the times when sediment removal is taking place.

**Project Title: Project B - Ash Slough Arundo Eradication and Sand Removal Project**

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**Attachment 5.1, Project C – Cottonwood, Dry and Berenda Creek Arundo  
Eradication and Sand Removal**

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## **Attachment 5.1 – Project C – Cottonwood, Dry and Berenda Creek Arundo Eradication and Sand Removal**

### **Schedule Notes**

#### Task 1: Administration

1.1 – Preparation of invoices to Applicant – This will be done on a monthly basis and will continue for the life of the grant.

#### Task 2: Labor Compliance Program

2.1 – Submission of County's Labor Compliance program to DWR – Since the County has other DWR grants it is likely that it already has a Labor Compliance Program registered with DWR. If not, this task will be done by a contractor in the first month of the grant contract.

#### Task 3: Reporting

3.1 – 3.3 – These tasks will be scheduled to complete reports at time periods required by the grant contract.

3.4 – Participation in partnership meetings will be required on a quarterly basis throughout the life of the project

#### Task 8: Environmental Documentation

8.1 Preparation and filing of Notice of Exemption – The County will submit on behalf of MID.

#### Task 9: Permitting

9.1 Create application for five year renewal of 1602 Stream Bed Alteration Permit – this will be done in 2012-2013 before the current permit expires.

9.2 Create application for ACE/RWQCB 401 and 404 permits for sediment removal – This is estimated to take 5 months for completion. It will be completed as soon as possible so that sand removal activities can commence.

9.3.1 – 9.3.3 – These activities will be done as soon as possible after the permits are issued so that sediment removal activities can commence.

9.4 Draft Stormwater Pollution Protection Plan for SWQCB – This will be done in the spring and summer prior to commencement of sediment removal activities.

#### Task 11: Implementation

11.1.1-11.1.3-- Arundo Eradication - The timing of Arundo eradication tasks are very specific. Arundo must be sprayed when it is going dormant so the herbicide is pulled down to the rhizomes, which is the only way to kill the plant. Arundo dormancy depends on temperature and rainfall, but generally spraying activities should take place between mid-September and early November. In order to control the height of Arundo when spraying activities take place, the canes are shredded about 60 days before spraying occurs. This allows the replacement canes to grow to a height of 5 feet, which

is optimal for effective spraying. About 30 days after the canes are sprayed, they are again mulched. This mulch stabilizes the banks and prevents canes from washing down and choking bridges or other narrow areas, which can be a major risk for flood.

11.2 Notices sent to Landowners—this will occur each year in the summer before Arundo eradication or sediment removal.

11.3 Sediment Removal – Sediment removal activities can take place wherever the sand is dry and there is no Arundo growing. (There may be additional constraints imposed by the permits which will be obtained for this activity). Since Arundo generally grows near water but not directly in water, creek channels may be free from Arundo in several target areas of the project.

#### Task 13: Project Management and Oversight

13.1.1-13.1.2-- Oversight will take place at the same time as the activities overseen.

13.2 – Data collection and monitoring oversight will take place at the same time as the activities overseen.

#### Task 14: Surveys, Monitoring and Reports

14.1.1 - Surveys and monitoring required by DFG 1602 permit –These activities will take place just prior to Arundo eradication and sediment removal commencing, since this is the time when activities could disturb nesting birds.

14.1.2 – Conduct baseline studies - this will be done just prior to work commencing each year.

14.2 – 14.3 – We are not certain of what monitoring and inspections will be required by these permits, but expect that they will have to take place just prior or during the sand removal activities.

14.4.1 Monitoring and report on Arundo eradication kill rate – This monitoring will take place every year in March and April after the Arundo has re-sprouted.

14.4.2 Report on sediment removed – This will take place when all sand removal activities have been completed.

14.5.1-14.5.2 - DFG Permit Renewal Fees and 401and 404 Permit Fees are anticipated to occur at the end of the permitting process

14.6—Survey contingencies could occur anytime after the DFG permit renewal

#### Task 15: Implementation Contingency

15 Implementation contingency will occur during the life of the project.

**Proposal Title: Madera Region IRWM Implementation Application**  
**Project Title: Project C - Madera Irrigation District Arundo Eradication and Sand Removal Project**

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**Attachment 5.1, Project D – Root Creek In-Lieu Groundwater Recharge  
Project**

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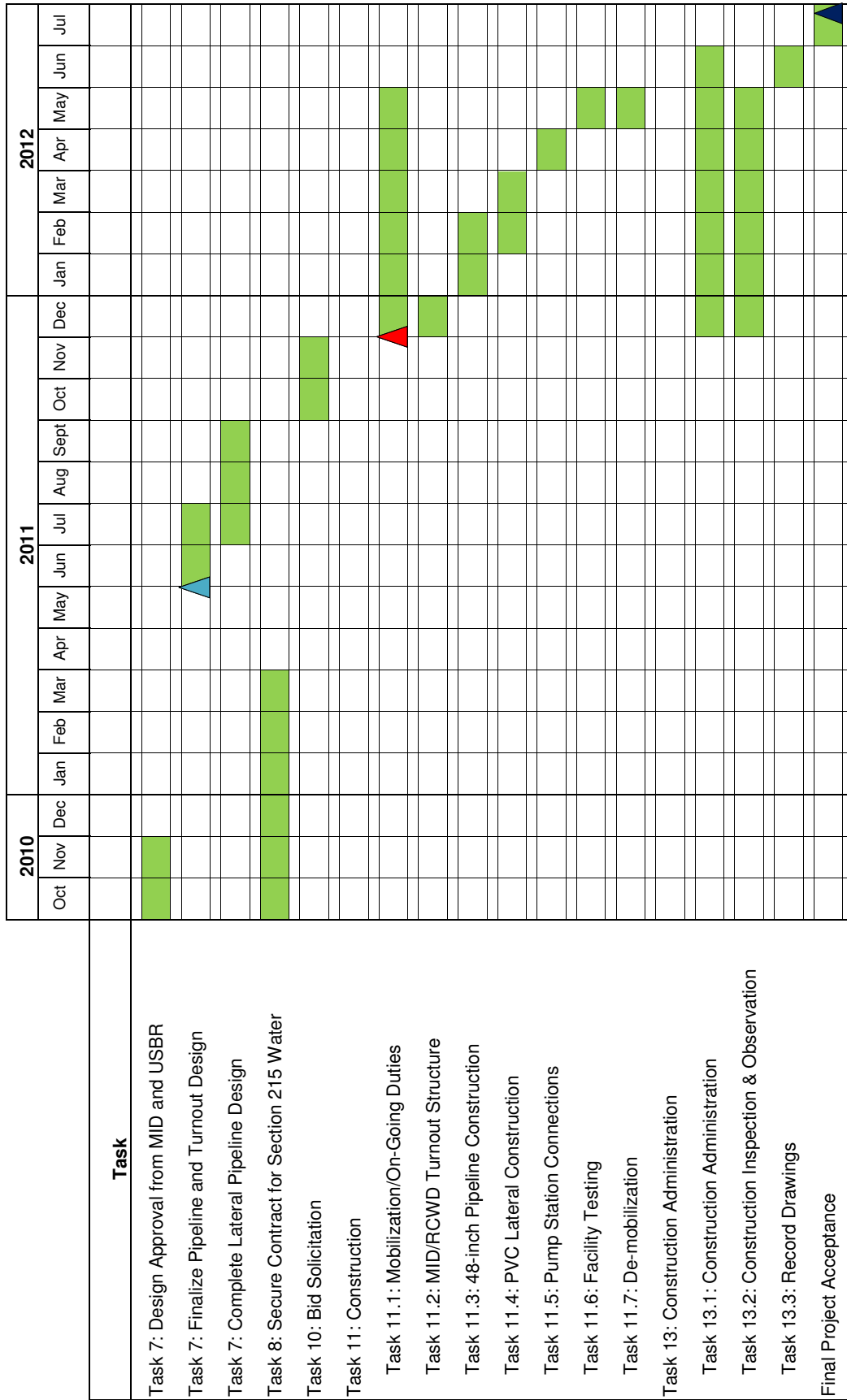
## **Attachment 5.1 – Project D – Root Creek In-Lieu Groundwater Recharge**

### **Schedule Notes**

RCWD anticipates having all permits and approvals by the anticipated grant award date in June 2011. RCWD anticipates the United States Bureau of Reclamation finalizing their approval for a Section 215 water contract once a down payment is submitted. As a result, RCWD can begin finalizing designs in July 2011 and begin construction within five months of the contract award. Project construction would be completed by the end of May 2012. The project would be completed by the end of July 2012.

Proposal Title: Madera Region IRWM Implementation Application

Project Title: Project D - Root Creek In-Lieu Groundwater Recharge Project



▲ Anticipated Contract Award

▲ Anticipated Construction Start Date

▲ Anticipated Project Completion Date

**Attachment 5.1, Project E – Sierra National Forest Fuels Reduction  
Project**

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## **Attachment 5.1 – Project E – Sierra National Forest Fuels Reduction Project**

### **Schedule Notes**

The USFS has identified several project activity areas that are in need of treatment to reduce fuels and move areas towards old-growth characteristics. These project areas all contribute to the goal of increasing forest health and the objective of reducing fuels in the WUI area, reducing post-fire flood hazards and benefitting the watershed. Several of these areas have already received some treatment but are still in need of further work to maximize these benefits (Cedar Valley, Foster, Nehouse, and Walker Mine/Topping). Other areas have already been analyzed under NEPA but have not had any work done (Double Gate, Grave/Yard, and Swortzel), and two areas (Grey's Mountain and Kelty) are still in need of NEPA/CEQA analysis. By including several project areas in this proposal under varying stages of readiness, the USFS can most efficiently complete the work needed to meet the goals and objectives. CEQA requirements can be completed fairly quickly and treatments completed in some areas while the NEPA/CEQA is completed for the other areas.

#### Task 1 – Administration

Invoices will be prepared on a quarterly basis.

#### Task 2 - Labor Compliance Program

Submission of the Forest Service Labor Compliance program to DWR will be completed immediately following grant award.

#### Tasks 7 and 8 – Final Design and Environmental Documentation

The NEPA/CEQA schedule is determined based on year the USFS plans on implementing the projects. The time required to complete NEPA, including all public comment periods, is then back estimated to the start date.

#### Tasks 10, 11, and 13 – Implementation, Contracting, and Oversight

It is expected that implementation in any project area will be conducted as color-coded on the project schedule, however actual on-the-ground acres to be treated at any time is determined during unit layout as part of the contract/project administration. This is necessary to provide flexibility for the Forest Service and their contractors, and is essential to getting the most acres treated in a given season because of environmental and regulatory constraints (e.g. Limited Operating Periods for wildlife, weather and ground conditions, soil and water protection measures, availability of equipment and personnel). Although soil compaction is minimized during mastication by having the

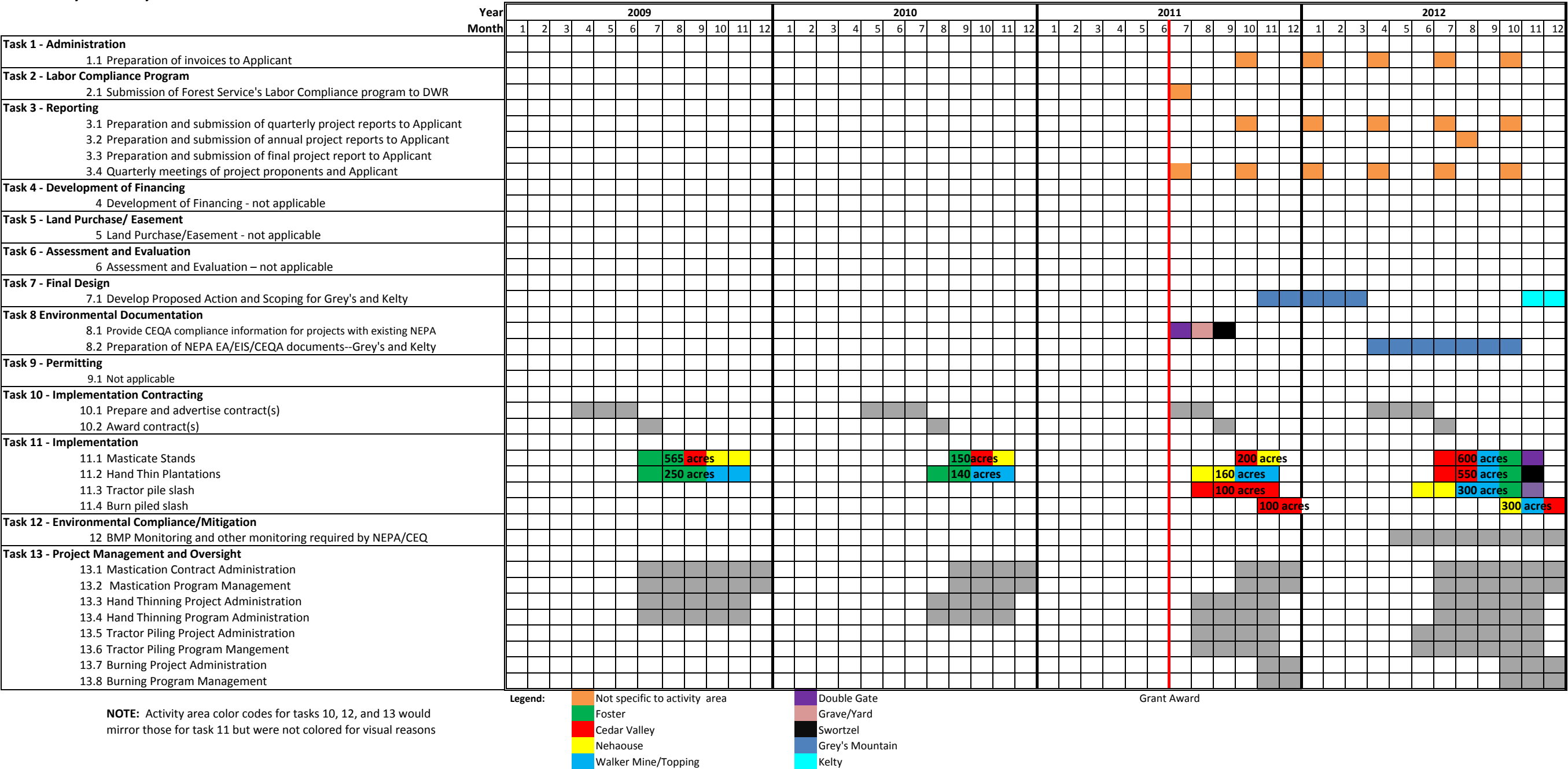
machine walk over a layer of slash, some disturbance does occur. The Cedar Valley project is in a watershed that has a high road/trail density and has had commercial thinning and other activities in recent years. The potential for cumulative watershed effects makes it necessary to space treatments over a several years to allow recovery time and minimize cumulative impacts.

#### Task 12 - Environmental Compliance/Mitigation/Enhancement

Forest Service BMPEP monitoring is done to ensure that BMPs were implemented and effective. Problems found in the implementation or effectiveness is then used to modify BMPs and management prescriptions for future projects. Implementation monitoring is done either during or just after project activities. Effectiveness monitoring is used to determine if the BMPs that were implemented were effective in protecting water resources. Therefore, these are done at least one winter after completion of the project activities.

Attachment 5.1 - Project E - Project Schedule

Proposal Title: Madera Region IRWM Implementation Projects  
Project Title: Project E - Sierra National Forest Fuels Reduction



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Attachment 5.1 - Project E - Project Schedule

Proposal Title: Madera Region IRWM Implementation Projects  
Project Title: Project E - Sierra National Forest Fuels Reduction

Year Month	2013												2014												2015													
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12		
<b>Task 1 - Administration</b>																																						
1.1 Preparation of invoices to Applicant																																						
<b>Task 2 - Labor Compliance Program</b>																																						
2.1 Submission of Forest Service's Labor Compliance program to DWR																																						
<b>Task 3 - Reporting</b>																																						
3.1 Preparation and submission of quarterly project reports to Applicant																																						
3.2 Preparation and submission of annual project reports to Applicant																																						
3.3 Preparation and submission of final project report to Applicant																																						
3.4 Quarterly meetings of project proponents and Applicant																																						
<b>Task 4 - Development of Financing</b>																																						
4 Development of Financing - not applicable																																						
<b>Task 5 - Land Purchase/ Easement</b>																																						
5 Land Purchase/Easement - not applicable																																						
<b>Task 6 - Assessment and Evaluation</b>																																						
6 Assessment and Evaluation – not applicable																																						
<b>Task 7 - Final Design</b>																																						
7.1 Develop Proposed Action and Scoping for Grey's and Kelty																																						
<b>Task 8 Environmental Documentation</b>																																						
8.1 Provide CEQA compliance information for projects with existing NEPA																																						
8.2 Preparation of NEPA EA/EIS/CEQA documents--Grey's and Kelty																																						
<b>Task 9 - Permitting</b>																																						
9.1 Not applicable																																						
<b>Task 10 - Implementation Contracting</b>																																						
10.1 Prepare and advertise contract(s)																																						
10.2 Award contract(s)																																						
<b>Task 11 - Implementation</b>																																						
11.1 Masticate Stands																																						
11.2 Hand Thin Plantations																																						
11.3 Tractor pile slash																																						
11.4 Burn piled slash																																						
<b>Task 12 - Environmental Compliance/Mitigation</b>																																						
12 BMP Monitoring and other monitoring required by NEPA/CEQ																																						
<b>Task 13 - Project Management and Oversight</b>																																						
13.1 Mastication Contract Administration																																						
13.2 Mastication Program Management																																						
13.3 Hand Thinning Project Administration																																						
13.4 Hand Thinning Program Administration																																						
13.5 Tractor Piling Project Administration																																						
13.6 Tractor Piling Program Mangement																																						
13.7 Burning Project Administration																																						
13.8 Burning Program Management																																						

**NOTE:** Activity area color codes for tasks 10, 12, and 13 would mirror those for task 11 but were not colored for visual reasons

Legend:

Not specific to activity area

Foster

Cedar Valley

Nehaouse

Walker Mine/Topping

Double Gate

Grave/Yard

Swortzel

Grey's Mountain

Kelty

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